The Manitoba Medical Review

No. 24 Winnipeg, July, 1944 No. 7

A Glimpse of Padua*

By I. Maclaren Thompson, B.Sc., M.B., Ch.B.(Edin.)

Professor of Anatomy, University of Manitoba, Winnipeg

I wonder if this little group of enthusiasts would agree that the five greatest figures in the history of Medicine are Hippocrates, Galen, Vesalius, Harvey and Lister. The Paduan medical school was in existence only during the lives of the last three of these, and two of them were connected with it intimately, Vesalius being a professor at Padua, and Harvey being a student there.

For reasons that we have no time to discuss, the Renascence began in the intellectual centres of Northern Italy, led, so far as Medicine is concerned, by Bologna and Padua. So great grew the fame of Padua throughout the sixteenth century that toward its end Shakespeare laid there much of the action of "The Taming of the Shrew". The play opens in Padua, Lucentio, who has come there from Pisa to study, remarking to his servant:

> Tranio, since for the great desire I had
> To see fair Padua, nursery of arts,
> I am arrived for fruitful Lombardy,
> The pleasant garden of great Italy.

The part played by Padua as a nursery of arts has been so finely set forth by Sir George Newman that I cannot do better than quote from his pen. Padua was

> "... The birthplace of Livy and of Mantegna; the home of Petrarch; the land of the exile of Cosimo de Medici, patron of learning (accompanied by his friend Michelozzo, the Florentine sculptor) and of Palla Strozzi, the scholar and collector of Greek literature, and, last and greatest of the banished heroes, of Dante Alighieri; the workshop of Giotto and Donatello and Squarcione; the university of Dandolo, Vesalius, Fracastorius, Fabricius and Galileo; the medical school of Linacre, Wootton, Caius and Harvey; the haunt of Tasso and Ariosto and Boccacio. What a galaxy! What immortal works of art, literature and healing spring from the deeds of these men. Is it surprising that there should come to drink at this source a long procession of thirsty students and seekers of all nations, over the Alps and over the sea? Is it astonishing that Padua proved to be the foster-mother of some of the most dynamic of the new and living forces of Medicine, which gave it renaissance when the light of morning broke over the West?"[2]

In the year 1537 the pilgrimage of students from across the Alps was joined by an energetic, turbulent young Belgian named Andreas Vesalius (1514-64). Having studied medicine at Paris and Louvain, he came to do clinical work in the hospitals of Venice and obtain his degree from the University of Padua; this he accomplished by the end of the year. In those days material was far too scarce for students to dissect; but this energetic young student had already, as he says, put his hand to the business in Paris and in Louvain, and he had new ideas about how Anatomy should be taught. It was well for him that he went to Padua, for in that enlightened University new ideas enjoyed a fairer reception than elsewhere at that time. Vesalius must have made quite an impression at Padua; for immediately upon graduating he was put in charge of the teaching of Anatomy. Of course this was not a full-time professorship, but the important point was that Vesalius had a free hand to reorganize the teaching. His chief idea was that the reading of Galen should be illustrated by expert dissections of the human body done by **himself,** instead of by the barbers. He combined into one the three offices of "lector, incisor et ostensor:" he himself read, dissected and demonstrated. But this method of objective demonstration led to the ever-recurring impossibility of making dissections agreeing in detail with Galen's descriptions. Brooding upon this, he soon realized that many of Galen's descriptions of soft parts were based upon dissections not of human bodies, but of animals, especially pigs and monkeys. Thenceforth he taught Anatomy straight from the human body itself. But no book along these lines was available for his students and others; so, with the collaboration of an artist named Calcar, a compatriot of Vesalius and a pupil of Titian, he threw himself energetically into the writing of a book on Anatomy based on first-hand dissection and observation. This great work, **De Humani Corporis Fabrica,** was published in 1543; its quatercentenary was celebrated last year (1943) in such few places as could manage it, for example Yale University.

Why is this book so revered? Because, so far as Science is concerned, it ushered in the Renascence; it was the first publication written in the spirit of Modern Science. It was the first comprehensive publication in any branch of Modern Science or Medicine based throughout on first-hand observation. Of course Vesalius commented freely upon the writings of others, especially Galen; but the work was founded primarily upon original observation. True, this was in the spirit of Hippocrates and of Galen; but that spirit had perished with Galen himself, and this was its re-nascence; this was the birth of **modern** Science, which is thus only four hundred years old.

It happened that the very same year, 1543, saw the posthumous publication of Copernicus' **De Revolutionibus Orbium Coelestium,** which, by the force of its acute reasoning rather than by any wealth of new observations, destroyed confidence in the ancient dogmas concerning the mechanism of the universe. Thus in that one grand year studies of the Macrocosm and of the Microcosm, both by medical men, combined to undermine the entrenched idea that the writings of the ancients were the one reliable source of information concerning the natural objects and phenomena of the universe. From that day to this, the only reliable source of such information has been direct observation of the objects and phenomena themselves, reliance being placed not on authority, but upon experience. Anatomists feel justified in taking pride in the fact that their subject was, so to speak, one of the parents of Modern Science, Astronomy being the other. The greatest credit, however, goes to the University of Padua for welcoming and

---

* Read at the History of Medicine Section of the Winnipeg Medical Society, March 31, 1944.

[1] Harvey, W. The Works of William Harvey, M.D. Trans. by R. Willis. London, The Sydenham Society. 1847.

[2] Newman, G The great Paduans. In Interpreters of Nature. London, Faber & Gwyer. 1927.

[3] Thompson, I. M. The teaching of Anatomy. Manitoba Med. Rev., 18:4, 1938.

encouraging a young man who wanted to teach a venerable and stereotyped subject by methods which in that age were new and unconventional. What was important in the **Fabrica** was not so much its observations as its method. Is it not interesting that Vesalius, who bequeathed to science the method by which **all** scientific discovery is made, himself made no famous discovery? Had he remained in academic work he might have done so. But even in Padua Vesalius aroused opposition and criticism; intolerant of this, he left Padua and teaching for Madrid and practice while not yet thirty years of age. But the seed sown by Vesalius in Padua was "sown on good ground; such as hear the word, and receive it, and bring forth fruit, some thirtyfold, some sixty, and some an hundred"; all this came to pass in the works of Fabricius, of Galileo and of Harvey.

In his short six years there Vesalius founded a great school of Anatomy at Padua. He was succeeded as professor by his pupil and assistant, Columbus (1515-69), a man far inferior to Vesalius, yet a precursor of Harvey in respect of his conclusion that the blood passes from the right side of the heart to its left side via the pulmonary vessels and the lungs. Another pupil of Vesalius, the famous Fallopius (1523-62), succeeded Columbus, and more worthily continued the Vesalian tradition. Saluting him, we must hurry on to his pupil and successor, the great Fabricius.

Hieronymus Fabricius (1537-1619) was a first-rate scholar and physician; perhaps, as we shall see, just a trifle too much of a scholar. He had a great reputation as a teacher, in spite of the fact that there was repeated difficulty in getting him to discharge his teaching duties. His scientific reputation rests mainly (though by no means exclusively) on two lines of research, embryology and the vascular system. Although casual observations had been made by others, Fabricius was the first systematic student of embryos since Aristotle. For early stages he used the hen's egg, as did Aristotle; this work was embodied in his **De Formatione Ovi et Pulli** (1621). For later stages he studied foetuses and membranes of man and other mammals; this was the subject of his **De Formato Foetu** (1600). To leave time for a glance at his work on the vascular system, we must forego discussing his embryological work.

In 1603 Fabricius published his **De Venarum Ostiolis,** a short but important treatise on the valves of veins. Though he said that he discovered the valves in 1574, they had been discovered before then. Even yet the priority in this matter is under discussion, but certainly several anatomists had described venous valves before Fabricius, and his attitude in this connection is a little difficult to understand. Fabricius was, however, the first to clarify and systematise our knowledge of the valves, and to work out their distribution throughout the body. Naturally, he puzzled long and carefully over the reason for their existence and distribution. Here is where he was too much of a scholar. In spite of the years that had elapsed since Vesalius' day, Fabricius was still steeped in the study of Galen. Had he adhered a little more to the vigorous Vesalian tradition of observation, and had he been a little more responsive to the experimental influence of his colleague Galileo, he might very well have discovered the meaning of the valves, and that the blood circulates. As it is, Fabricius' greatest claim to fame is as the teacher and inspirer of Harvey.

One matter relating to Fabricius' teaching must not be passed over, namely, his famous anatomical theatre. The story begins with one of Vesalius' predecessors named Benedetti, who conducted his "anatomies" in a wooden theatre constructed somewhat along the lines of the great amphitheatre in Rome. The "anatomy" continued only as long as the unembalmed material lasted in the Italian climate! At its conclusion the theatre was dismantled, stored away, and reassembled for the next "anatomy." Benedetti's theatre at Padua is the earliest anatomical theatre of which we have record. Such portable wooden open-air theatres were used by all the Paduan anatomists from Benedetti to Fabricius, including, of course, Vesalius and Fallopius. In 1594 there was constructed for Fabricius (it is said at his own expense) a permanent indoor anatomical theatre, in one of the university buildings. It was oval, and consisted of six galleries, each so narrow that the spectators could only stand. It was an inside room, without windows, its darkness being pierced only by two candelabra of three candles each, and eight lamps each held by a student. Considering the nature of the work done in it, it is an amazing fact that not even for ventilation was this room provided with windows until 1844! In this theatre Anatomy was taught from 1594 until 1872! Here were heard the voices of Fabricius, Casserius, Spigelius, Vesling, Morgagni and many another. It is difficult to realise that this very theatre, where young William Harvey listened to the teaching of Fabricius, is still in existence (though no longer used as such)—unless it has been destroyed in the present war. Those of you who can recall the anatomical theatre in our own Medical College will realise that it is patterned after this famous theatre at Padua—indirectly, no doubt, but none the less really, even to some of its discomforts!

Fabricius had as his colleague in mathematics and physics, and also as his patient, one of the greatest figures in the history of Science, Galileo Galilei (1564-1642), who was born in Florence the year that Vesalius died in Zante and Shakespeare was born at Stratford-on-Avon. For about twenty years Galileo taught at Padua. I am going to discuss this remarkable man only in so far as he influenced Biology and Medicine, an influence that has been too little appreciated.

Galileo was a very great physicist and astronomer. Not only was he a first-rate observer in the Vesalian manner; Galileo was the first **systematic** experimenter in any science since Galen, some 1400 years earlier. Nay, more: into his carefully planned experimentation he introduced the processes of accurate weighing, measuring and timing. He was most brilliant in the field of quantitative experimentation, which he entered when, while a student at Pisa, he timed the swinging of a lamp in the cathedral by feeling his own pulse. His magnificent contributions to physics and astronomy I must pass over. For his astronomical observations he invented the telescope. This concern with optics led to his contributing to the development of the microscope, and to an interest in the optical properties of the eye. Galileo's study of the eyes of insects through the microscope was the first use of that instrument in Biology. Seeking a unified concept of the universe, Galileo was eager for facts indicating whether or not phenomena occurring within living bodies follow definite quantitative laws. If similar relationships obtained between events within the Microcosm as between those of the Macrocosm, so much the better for his unified concept of the universe. But to us Galileo is most important because of the influence of his **quantitative methods** upon the development of the medical sciences. In his influence on Medicine he may be compared with two other non-medical scientists, Aristotle and Pasteur. Galileo's influence reached Medicine mainly through two of his students, Sanctorious and Harvey.

Santorio Santorio (1561-1636), usually known by the latinised form of his name, Sanctorius, became professor of Medicine at Padua. He is justly honoured as the first to introduce systematic quantitative methods into Medicine; thus he was the first impor-

tant student of quantitative relationships in living things. True, most of his ideas he got from his teacher, Galileo; but he showed great ingenuity in putting Galileo's ideas into practice. For instance, Galileo invented an alcohol thermometer (the mercury thermometer was invented later by Fahrenheit), and Sanctorius used it clinically. He also put into practice Galileo's suggestion of reversing his (Galileo's) youthful experiment in the cathedral at Pisa, and utilising the swings of a pendulum for determining the rate of the pulse. Thus, accurate methods of taking pulse and temperature were introduced into Medicine at Padua. Sanctorius was also the first student of what today we call metabolism. To study the changes in the weight of the human body brought about by eating, excreting, perspiring, and the like, Sanctorius devised a special chair, suspended from the arms of a balance. His **Ars de Medicina Statica**, published in 1614, bears as its motto this characteristic profession of faith: **Pondere, Mensura et Numero Deus omnia fecit** (God made all things by weight, measure and number). Sanctorius was given to aphorisms, of which one example must suffice: "A person may certainly conclude himself in a state of health, if upon ascending a precipice he finds himself more lightsome than before."

In the year 1348 an Englishman named Edmund Gonville obtained permission from King Edward III to found a college in Cambridge for the study of dialectics and other branches of science. But Gonville died three years later, before his plans had fructified. His executor, however, not only faithfully carried out Gonville's plans, but himself contributed to the endowment. To this college, then known as Gonville Hall, there came in 1529 a student named John Caius (1510-73). In 1533 he graduated B.A., and followed an academic career which need not detain us. A few years later he decided to study Medicine, and to study it in a medical school famous amongst others for its young professor of Anatomy, Vesalius, and its professor of Medicine, Montanus; so to Padua he went in 1539, and there he graduated in 1541. We happen to know that for eight months Caius lived in the same house as Vesalius, and that at this time Vesalius was hard at work on the **Fabrica.** This close association with Vesalius, while the latter was doing his best work, gave Caius a grounding in Science and Anatomy. Indeed, for two years after his graduation Caius taught in Padua; then he travelled in Europe for a year, and returned to England; he settled in London, where for about twenty years he taught Anatomy at the Barber-Surgeon's Hall. Though he made no anatomical discoveries, he it was who introduced the Vesalian method of teaching and studying Anatomy into the British Isles. True, "anatomies" were authorised in Edinburgh as early as 1505 (before Vesalius was born), and in London in 1540; but Caius brought the Vesalian method of practical Anatomy straight from Padua to London in 1544, the year after the publication of the **Fabrica.** Caius was not an out-and-out follower of Vesalius, however; though practising Vesalian observation, he tended to cling to Galenic interpretations, even as Fabricius still did years later. But his introduction into England of sound Vesalian methods of practical Anatomy was most important. Caius was a prominent physician, his patients including three British monarchs, Edward VI, Mary and Elizabeth. In 1557 he contributed so munificently to the endowment of his old college at Cambridge that from that day to this it has been known as Gonville and Caius College. It has been a favourite college with students preparing to enter Medicine; and for many a year after Caius' day it was the Gonville and Caius tradition to follow his example and go to Padua for the medical course.

Thus it came to pass that about a score of years after the worthy John Caius had been gathered unto his fathers, there entered his college a slight, quiet, Kentish youth of sixteen named William Harvey (1578-1657). Observing the Caian tradition, after graduating B.A. he went to Padua in 1597 to study Medicine, obtaining his degree in 1602. I do not know why Harvey spent so much longer than Caius over his medical course; perhaps the regulations had been changed. Like Caius, after graduating Harvey returned to England and settled in practice in London, devoting his spare time to one of the most important series of observations, dissections and experiments ever planned, executed and interpreted. In 1615 Harvey was appointed Lumleian Lecturer in Anatomy and Surgery to the Royal College of Physicians of London; in his first course of lectures he announced his conclusion that the blood has "a motion, as it were, in a circle". Such was his caution, however, that he did not venture to print his discovery until 1628—probably fifteen years after he made it, and certainly thirteen years after he had first publicly announced it. Times change, and we change with them!

In 1628, then, appeared Harvey's small book, written in Latin, called **Exercitatio Anatomica de Motu Cordis et Sanguinis in Animalibus.** May I invite your attention to the exact wording of that title? On a former occasion I have pointed out[3] that it is **not** "An Anatomical Dissertation on the Structure of the Heart and Blood Vessels"; it is **not** "A Physiological Dissertation on the Movement of the Heart and Blood"; it is "An **Anatomical** Dissertation on the **Movement** of the Heart and Blood." Harvey was an anatomist; but here was a new kind of Anatomy, the anatomy of movement, the study of living anatomical structures by experimental methods, a kind of Anatomy untouched since the death of Galen some one thousand four hundred years earlier. Where did Harvey come by that kind of Anatomy? He was a student of Fabricius in Padua; and we have seen that Fabricius' chief lines of research were embryology and the vascular system. Fabricius' influence on Harvey is obvious upon reflecting that Harvey's main lines of research were precisely those of his teacher, and that along both lines he surpassed Fabricius.

Harvey's great work on Embryology, his **Exercitationes Anatomicae de Generatione Animalium,** was not published until 1651. His fame as the discoverer of the circulation so overshadows his distinction as an embryologist that the latter is commonly quite overlooked. Yet had he never worked on the circulation, Harvey would have been famous in the history of embryology, for the nineteen long centuries between Aristotle and Harvey show only one embryologist of their rank, namely, Fabricius. As with Fabricius, we must of necessity and with regret pass over Harvey's embryological researches to consider his work on the circulation.

When Harvey was his student, Fabricius was preparing his work on the valves of veins (just as Vesalius was preparing his **Fabrica** while Caius was his student). Harvey thus became familiar both with Fabricius' observations and with his thoughts on this matter. Fabricius' methods were: observation, dissection and simple experiment. He was a comparative anatomist, and employed the comparative method: that is, he compared the arrangements of anatomical structures in different animals, not, of course, from an evolutionary viewpoint, but in the hope of inferring therefrom something of their functional significance. Harvey used effectively all these methods that he learned from Fabricius. But let Harvey himself tell us about the crucial evidence that really settled the matter.

> "Let us assume either arbitrarily or from experiment, the quantity of blood which the left ventricle of the heart will contain when distended to be, say two ounces, three ounces, one ounce

and a half—in the dead body I have found it to hold upwards of two ounces. Let us assume further, how much less the heart will hold in the contracted than in the dilated state; and how much blood it will project into the aorta upon each contraction... and let us suppose as approaching the truth that the fourth, or fifth, or sixth, or even but the eighth part of its charge is thrown into the artery at each contraction; this would give either half an ounce, or three drachms, or one drachm of blood as propelled by the heart at each pulse into the aorta; which quantity by reason of the valves at the root of the vessel, can by no means return into the ventricle. Now in the course of half an hour, the heart will have made more than one thousand beats, in some as many as two, three, and even four thousand. Multiplying the number of drachms propelled by the number of pulses, we shall have either one thousand half ounces, or one thousand times three drachms, or a like proportional quantity of blood, according to the amount we assume as propelled with each stroke of the heart, sent from this organ into the artery; a larger quantity in every case than is contained in the whole body... But indeed, supposing even the smallest quantity of blood to be passed through the heart and the lungs with each pulsation, a vastly greater amount would still be thrown into the arteries and whole body than could by any possibility be supplied by the food consumed; in short it could be furnished in no other way than by making a circuit and returning."[1]

Now where did Harvey get that kind of Anatomy? In Padua, of course. From Fabricius? Oh, no; Fabricius never spoke in **that** language. Who in Padua was the exponent of that sort of quantitative experimentation and reasoning about the quantitative relationships between events? Who, indeed, but Galileo? The idea of the circulation arose in Harvey's mind from observations made by the methods of Fabricius; but the truth of that idea was proven by the methods of Galileo. In its fundamental features Harvey's research is a model of its kind even to this day. No dimming of the glory that is his follows from viewing it against its Paduan background, woven of the scholarly science of Fabricius and the Olympian intellect of Galileo. But though Harvey refers to Fabricius, he makes no mention of Galileo. This suggests that Harvey himself did not realise Galileo's influence over him; that influence may have been exerted not personally (as was Fabricius'), but indirectly. So powerful an intellect as Galileo's must have influenced all Padua (except, apparently, Fabricius!); hence Harvey may have thought of it (if he thought of it at all) as simply a Paduan influence, overlooking its personal origin.

Thus, just as Caius brought to England from Padua the methods of Vesalius, so Harvey brought to British Anatomy from Padua the methods of Fabricius and of Galileo. By the combination of those methods he solved a problem that he got from Fabricius. I think that this is a fair statement of Harvey's debt to Padua.

Of one later Paduan anatomist I would fain speak: Morgagni (1682-1771); but, as with Fallopius, we have time only to salute him in passing; for after all our subject is Padua, rather than any particular man or men.

It has been my endeavour to persuade you that much that is best in Anatomy as we know it was brought to England from Padua by Caius and by Harvey. About a century later the Paduan influence reached Edinburgh indirectly, via Leyden; but that, as Kipling says, is another story.

In conclusion, I should like to read to you two sharply contrasting passages referring to Padua in modern times. The first is from the charming pen of Sir George Newman, who in 1921 made his second pious pilgrimage to Padua. He spent a sunny day in the ancient University, musing on its great dead and their high achievements.

> "But the evening came, and its long shadows fell across the plains of Lombardy and enshrouded the Euganean Hills; the workers came in from the fields and vineyards, the city toilers rested from their labours, the great bell of the Cathedral sounded the Ave Maria at sunset; and walking away in the twilight through those quiet and forsaken streets of the Middle Ages, familiar three centuries ago to Fabricius and Galileo and Harvey, I listened to 'the deep sad murmur of voices long dead'."[2]

The next is from the **Winnipeg Tribune** of December 17, 1943.

> "Algiers, Dec. 17—Striking at enemy communication lines through the Alps for the second consecutive day, Allied heavy bombers blasted railway yards at Padua in north-eastern Italy.
>
> Padua is 18 miles west of Venice, on the secondary German supply route to the Italian battleground...".

Some Experiences with Pulmonary Embolism

By F. Gerard Allison, B.A., M.A. (Man.), M.R.C.P. (Lon.)

The modern active treatment of recumbent patients with quiet venous thrombosis, with or without pulmonary embolism, imposes a severe strain on the nervous system of the doctor. Formerly fatal pulmonary embolism could be shrugged off as an unfriendly act of destiny, but times have changed.

Lest any should suppose pulmonary embolus to be the exclusive territory of the surgeon or obstetrician, I wish to mention three medical cases.

1. Man of 76 with rather severe coronary occlusion who developed slight aching in left leg 9 days after his occlusion and had Homan's sign of calf pain on dorsiflexion of the foot. A surgical consultant recommended elevation of the leg. Six days later sudden death occurred.

2. A perfectly healthy woman of 44 had 2 weeks' rest in hospital because of husband trouble. On getting out of bed sudden unconsciousness, marked dyspnoea and cyanosis, but no pain. Pulse 130, regular. Next day pain left lower axilla on cough; no staining. Pain and swelling whole left leg 3 days later. Second attack unconsciousness with increase in dyspnoea, cyanosis and tachycardia two weeks after the first attack. On examination the day after the second attack—dyspnoea, cyanosis, tachycardia. P_2 plus. No signs raised peripheral venous pressure. Gradual recovery. Discharged 6 weeks later. An admission order of "up to bathroom" might have prevented this sequence of events.

3. Man of 71 with status asthmaticus after 3 weeks in bed developed left leg ache which he did not mention. Two days later two slight attacks of chest pain were followed by staining of the sputum. Homan's sign was positive, the femoral vein was tied off distal to the saphenous opening and there were no sequelae.

Turning now to post-operative and post-partum cases—

4. Woman of 63 two weeks after a gastric operation developed pain in the left shoulder on cough, and dyspnoea. The sputum was not stained. Three days later a sudden substernal oppression, dyspnoea, sweating, pallor and tachycardia occurred. Examination a few hours later disclosed only slight cyanosis, dyspnoea, and pulse 104; Homan's sign negative. Heparin and Dicoumarin started. Electrocardiogram characteristic of pulmonary embolism—Q_3 T_3; Large S_1; T_1

inverted. Four days later a third attack occurred when the prothrombin time was 45%. By the grace of God, a grain of Papaverine intravenously (kept in the room for emergency use) and oxygen, the patient survived. Two days later Homan's sign became positive in the left leg and the femoral vein was tied off. Two days after this, with the prothrombin time 40%, a thrombophlebitis began in the left axillary vein. In succeeding days, while prothrombin time varied from 38 to 28%, both subclavian veins clotted, but no further emboli occurred. Prothrombin time left at 25%. She was allowed up 2 weeks after the last embolism.

5. Man of 65. Colostomy for rectal carcinoma. Twelve days later pain in right leg and temperature of 99°, two days after getting up. Ten days after leg pain appeared developed pain right lower chest and right shoulder on breathing and temperature of 100°; bloody sputum next day. Examination 5 days after embolus gave negative Homan's sign. Dicoumarin started. After 750 mgm. in 5 days prothrombin time 50%. Maintained 32 to 40% for another 6 days. Slight staining of faeces. Prothrombin time allowed to rise to normal before perineal stage of operation. Two days later 300 mg., next day 200 mg., 3rd day 100 mg. On day of last dose prothrombin time 36% and patient began to bleed from rectum, nose and penis. Bled 11 days. Patient given 5 transfusions. Haemoglobin did not fall below 30%; 3 weeks after operation haemoglobin 52%.

6. Woman of 32, confined mostly to bed for a month before parturition because of severe anaemia, had two severe attacks of dyspnoea, cyanosis and weakness 2 hours apart on second day after labor. Pain in region of apex beat a few hours later. On examination at this time heart and chest negative, tender under ball of left foot. Homan's sign negative until the following day. Electrocardiogram somewhat suggestive of pulmonary embolism (small Q_3; T_3 flat; T_1 very small). X-ray of chest showed heart shadow enlarged, and shadow at left base consistent with pulmonary embolism.

Given Heparin for 48 hours while Dicoumarin was taking effect. Left femoral vein tied off distal to saphenous opening as soon as Homan's sign appeared. Home on 12th day.

Conclusions

1. Watching for leg aches and unexpected temperatures in recumbent patients and testing for painful dorsiflexion may avoid tragedy.

2. Pulmonary embolism is the most likely cause of collapse of a bed patient. It is proved by the appearance of any one of pleural pain, stained sputum, typical electrocardiogram or X-ray appearance of infarct. Painful dorsiflexion if found is also confirmatory. Symptoms may be insignificant—slight chest pain and staining (case 3).

3. Tying off of the femoral vein distal to the saphenous opening on one or both sides is indicated when Homan's dorsiflexion sign is present, and lead to no embarrassment of circulation in the leg in the 3 cases here described. Rare cases may need elastic bandages for a time for oedema. This minor operation prolongs life of both patient and doctor.

4. Heparin is relatively harmless in use because its effect is gone in a few hours. It costs about $12.00 a day. Raise clotting time to 12 minutes.

5. Dicoumarin administration is difficult because of the latent period of about 48 hours before a given dose shows its effect. Daily prothrombin times are essential, striving to keep the time about 1½ times to twice normal or at 40 to 25% of normal.

Even so, the patient may continue to form clots, or bleed. 400 mg. of the new non-toxic vitamin K. oxide intravenously has been shown to overcome Dicoumarin effect in 18 hours but is not yet commercially available. (New Eng. J. Med. Aug. 26, 1943. 353.)

7. Papaverine ampoules and a sterile syringe kept in the room of an embolism case constitute a useful routine precaution for emergency use.

6. The colostomy case was a bad risk for Dicoumarin treatment, as such patients may bleed spontaneously owing to lack of absorption of vitamin K by the large bowel.

Hospital Luncheon Program Reports

St. Joseph's Hospital

Duodenal Ulcer in a Child—Dr. L. Hershfield

Dr. L. Hershfield presented a girl of 10 who had complained of abdominal pain for nearly three years. A year ago a barium series revealed 50% retention. She was put on medical treatment for peptic ulcer. A recent X-ray showed 90% retention. As medical treatment had failed it was decided to operate. A large indurated ulcer was found near the pylorus and gastoenterectomy was performed. Recovery was uneventful and the child has gained weight as well as being freed of her symptoms.

Gastroduodenal ulcers in children occur but are not frequent. Acute ulcers develop during the first two years of life, usually in the first months. Chronic ulcer appears between the ages of 10 and 14. Their rarity is shown by the fact that out of 8,260 cases of gastroduodenal ulcer only two occurred in children, one of the stomach and one of the duodenum. These are Mayo Clinic figures. In this case the ulcer began at the age of 8, which is very early. A.L.S.

Tympanites and Paroxysmal Auricular Fibrillation Dr. A. L. Shubin

Dr. Shubin showed a woman of 58 who for 10 years had complained of weakness, abdominal pain, (especially in the right hypochondrium) nausea and flatulent distension. She had seen a great many doctors without benefit. In June, 1943, she had an attack in which her temperature rose to 100 and the pain was great. Diagnosis of acute cholecystitis was made and operation revealed an enlarged distended gallbladder which was removed. The pathological report was cholangitis and hypercholesterolemia. During her convalescence she had a paroxysm of auricular fibrillation associated with great abdominal distension. This condition responded to digitalis. Since then she has had several attacks of vomiting, massive tympanites and fibrillation. This woman's early complaints were probably all functional. The gallbladder disease was not great enough to explain her severe symptoms or their long duration. The recent fibrillation may have an organic basis but for over a year she has shown no change between attacks, and this, as well as the other symptoms during the spells, may also be functional. A.L.S.

Hematemesis — Dr. C. S. Hershfield

A thin woman of 28 complained that she had vomited blood. Her appearance suggested tuberculosis and she said that for several months she had been losing weight and strength. She had had indigestion for several years. On the morning of admission to hospital she developed severe abdominal pain. When it passed, in about 2 hours, she had a little food which nauseated her and she vomited about a pint of blood. The vomiting was repeated once. It would appear that all her symptoms were due to an unrecognised peptic ulcer. She was treated medically by Muelengracht diet and small transfusions. She recovered quickly and is much improved in every way. A.L.S.

Winnipeg General Hospital

Fatal Case of Beri-Beri Heart

Dr. Allison presented the case of a young woman 21 years of age, obese, estimated to weigh 175 pounds, with blood pressure 160. This young woman went on a diet of her own choosing and in 3 weeks lost 25 pounds. This diet was mostly liquids, with no vitamins. She noticed that she fainted on climbing stairs. At Christmas time she developed a cough and dyspnoea on exertion.

When she saw Dr. Allison on January 14, 1943, she had a regular pulse rate of 100, gallop rhythm, with an abnormal cardiograph tracing. Blood pressure was 95/65. Wasserman was negative. She was given Vitamin B intravenously and also by mouth. Within a week her subjective symptoms had vanished and the patient went home on her own volition.

The last week of February, 1943, the patient returned to hospital. Despite treatment she died on March 1, 1943.

A careful post-mortem upon this patient suggested that the cause of death was Beri-Beri heart.

Dr. Williams gave an excellent resume of avitaminosis. This is quite a common disease in fowl and as a rule responds well to administration of vitamin B_1. Avitaminosis would appear to be due to lack of vitamin B and a debilitating factor; the latter is uncertain. At first there is a myelin degeneration of the nerve sheath, later on there is a true Wallerin degeneration of the nerves. The vagus nerve and a portion of the 4th ventricle are most frequently affected. There are two clinical types of Beri-Beri—the dry, or paraplegic, and the wet, or oedematous.

There was a spirited discussion; those contributing were Drs. Hunter, Nicholson, Shubin and Rice.

D.C.A.

Memorial Hospital for the Treatment of Cancer and Allied Diseases, New York

Dr. Penner gave a most interesting and breezy resume of almost a year spent in New York at the Memorial Hospital. Part of his talk gave instances of changed conditions in the city due to the drawing of all surplus labour into the Army. This is the 60th year of the Memorial Hospital; it contains 225 beds and some 15,000 specimens pass through the laboratory in a year. Dr. Penner reviewed the internal workings of the hospital and stressed staff conferences.

D.C.A.

Obituaries

Dr. Brandur Jonsson Brandson, professor emeritus of surgery, died at his home in Winnipeg on June 20. Few doctors in Western Canada have been more widely known and deeply loved or have exercised a greater influence among their own people in the field of medicine.

Born in Iceland, June 1, 1874, he came with his parents to Minnesota at the age of four. He graduated in arts from Gustavus Adolphus college at St. Peters, Minn., and in medicine from Manitoba Medical College in 1900. For five years, interrupted by a year in Great Britain, he practised at Edinburg, N.D. With his life-long friend, Dr. O. Bjornson, he returned to Winnipeg in 1905.

For a time they practised in partnership but later each took the line of work for which he was specially fitted. Dr. Bjornson became professor, then emeritus professor, of obstetrics, while Dr. Brandson rose by successive steps to be lecturer in surgery, associate professor, professor, head of the department of surgery 1927-1934, and on his retirement, emeritus professor. At the convocation last May the University of Manitoba conferred on him the degree of Doctor of Laws, honoris causa.

This is not the first honorary degree granted him. In 1930 he was appointed a representative from Canada to attend the millenium of the Althing, the Icelandic parliament. At Reykjavik the University of Iceland conferred the honorary degree of Doctor of Medicine. Five years later the Icelandic government made him a Grand Knight Commander of the Royal Icelandic Order of the Falcon. At the 98th annual meeting of the British Medical Association in Winnipeg, 1930, Dr. Brandson was one of the vice-presidents in the Section of Surgery. The Winnipeg Medical Society granted him life membership in 1943. He was a Fellow of the American College of Surgeons and a Charter Fellow of the College of Physicians and Surgeons of Canada.

He is survived by his widow, two daughters and a son. One daughter is the wife of Major John A. Hillsman, R.C.A.M.C., overseas. The son, Lieut. Thomas L. Brandson, is believed to have been serving as paymaster on H.M.C.S. Athabaskan, sunk recently in conflict with German destroyers in the English Channel.

In his arts college Dr. Brandson had as his friend and classmate the late Thomas H. Johnson, who also went to live in Winnipeg and became Attorney-general of Manitoba. Though Brandson took a keen interest in politics and was repeatedly urged to contest an electoral district, he never allowed his name to go for nomination.

At the time of his death he was honorary president of the First Lutheran Church, Winnipeg. An institution very dear to his heart was the Icelandic Old Folk's Home at Gimli, the "Home of the Happy Sunset".

In addition to his early postgraduate year in Great Britain and the Rotunda, Dublin, he also studied in London and Vienna. He was a foremost surgeon, possessing that greatest of surgical qualities —sound judgment. His enduring fame, however, will be his gifts as a teacher. Wise, prudent, humane, and above all, kindly, he will be long remembered.

★ ★ ★

Dr. Victor George Williams, prominent Winnipeg specialist, died at his home on May 31. Born in Cornwall, England, in 1872, son of Sir Frederick Martyn Williams, Bart., and Lady Williams, he was educated in England. Early in life he went to Natal, South Africa, then came to Canada in 1893 to farm at Binscarth. In 1907 he graduated in medicine from the University of Manitoba and later took post-graduate work in London. In 1915 he went overseas with the R.A.M.C. and was attached to the Cambridge Hospital, Aldershot. Returning to Canada he served for a time in Tuxedo Military Hospital, and on resuming civil practice he was attached to the Children's Hospital in the eye, ear, nose and throat section.

There were few forms of sport in which he was not a finished performer: track, football, cricket, lawn bowling and curling. In later years he was a leader in contract bridge tournament play.

He is survived by his widow, a daughter and two sons.

Few students who were present at the Manitoba inter-collegiate sports in the fall of 1902 will forget the thrill when Vic Williams, then thirty, fresh from the farm and in unorthodox costume, won the high jump revealing a perfection of form hitherto unknown in western Canada.

Editorial

During the summer months the Review will have fewer pages. We are limited as to paper and in order to make the winter numbers plumper we borrowed from the summer issues, a debt which must now be repaid. The present issue contains an article from the pen of Professor Thompson. It is cultural rather than clinical but all the more valuable on that score. Medical History is both interesting and important, more especially when the scenes of its development have again become the battlefield where progress struggles against reaction.

One cannot think with equanimity of the Huns in Italy. The hordes of Hitler differ from those of Alaric and Attila only in their garb and weapons; in spirit they are the same and there is no saying how they may ravage and despoil Northern Italy before they are expelled. Northern Italy should mean much to us for not only is it richer in artistic, cultural and antiquarian wealth than any other portion of the globe but it was the birthplace of modern learning and of modern medicine. We are, in the spirit, citizens of many Italian cities and we should be as familiar with our medical shrines as theologians are of their religious ones.

I have received a number of letters from our friends in Italy. One was from Eddie Corrigan—a most tantalising one—for it was quotable from start to finish of its 7 pages. But he has forbidden its publication. He did not say where he was but it was within—and well within—the reach of German shells. Moreover, he had about him mines and booby traps such as the Huns strew with lavish hand and diabolical cunning. His letter would give no comfort to the enemy for it could not be pleasing to Hitler to know how daring, how devoted and how successful are our medical officers.

There is also, in this issue, a bit of local history as written by Dr. Ross Mitchell. Dr. Mitchell may not have attended the birth of our Journal but he certainly guided it through its infancy and adolescence. On the clinical side are Dr. Allison's article and the last Hospital reports for the season. The hospital luncheons are over for the present but when they resume in the fall we shall bring you their substance as in the past.

★

Dave Genoff

Dave Genoff is dead. Earlier in the year he developed a cough which persisted. By the time he sought advice he had fluid on his chest and the fluid was bloody. From then on his decline was steady and the end came on the seventeenth of June. Many heard the news with sorrow for he was well liked. He was skillful and conscientious in his work, honest in his dealings and sincere in his opinions. He was, a strange thing in this day and age, almost an anti-nationalist. He was not ashamed of his blood but did not regard his race as a chosen people and he had no patience with those who set their race or culture or nation above all others. He felt for the Jews tortured and dying in the Warsaw Ghetto but he had the same sympathy for the English folk of Coventry and the patriots of Greece and gave to the limit of his means for the relief of their distresses.

It is natural to think of the dead with sadness. So often our mind's eye holds a picture of them wasted, ailing and dying; but I prefer to think of Dave as I remember him at parties and dinners, telling his stories, amusing in themselves, but doubly so as he told them; or with his friend, George Evoy, each the other's butt, splitting our sides with laughter. So do I prefer to remember him and so, I think, would he choose to be remembered. J.C.H.

A Retrospect of The Manitoba Medical Bulletin—1921-1934

Following the close of World War I there was much yeasting in the medical profession. From this tendency Manitoba was not immune, and the necessity for organizing the profession in the province was recognized. The two moving spirits in the Manitoba Medical Association of that era were the late Dr. R. D. Fletcher, President, and the late Dr. T. Glen Hamilton, Secretary. Due chiefly to the efforts of the latter, the policy of issuing a monthly bulletin was inaugurated and Bulletin No. 1, a leaflet, 3¼" x 5¾", appeared in July, 1921. The name of the editor or editors does not appear, but it is probable that both Dr. T. G. Hamilton and Mr. E. Court, Associate Secretary, acted in this capacity.

The original leaflet size persisted for the first forty numbers. The only complete file of the Manitoba Medical Bulletin is in the possession of the Manitoba Medical Association (Canadian Medical Association, Manitoba Division), but the Manitoba Medical Library has a file lacking only No. 40. If any of our readers should chance to find this particular leaflet and would donate it to the library, he would earn the deep gratitude of the librarian.

The various numbers of the Bulletin or Review constitute a valuable history of the organized medical profession in Manitoba. In his "Bibliography of Canadian Medical Periodicals", Montreal, Renouf Publishing Co., 1934, Dr. H. E. MacDermot, now editor of the Canadian Medical Association Journal, made the following note: "The Bulletins of the Vancouver, Manitoba and Nova Scotia Medical Societies serve as provincial medical journals of considerable importance, and contain much valuable historical material."

One subject much stressed in the early numbers is the campaign against irregular practitioners who in the flamboyant '20's were numerous and bold. A Bill introduced into the legislature to license osteopaths was defeated in 1923.

Reference is made to the opening of the new wing of the Medical College on Feb. 10, 1922, by Hon. Dr. R. S. Thornton, Minister of Education, and the unveiling of the war memorial tablet on April 30, 1922, by Gen. H. D. B. Ketchen, the address being given by Dr. B. J. Brandson. The new Medical Arts Building (1923) and the Shriners' Hospital (1925), the addition to Misericordia Hospital (1926), Central Tuberculosis Clinic (1930) and St. Boniface Sanatorium (1931) are also mentioned.

In 1924 Manitoba Medical Association, through the Canadian Medical Association, extended an invitation to the British Medical Association to hold one of its Annual Meetings in Winnipeg. As a result of this invitation Sir Jenner Verrall and Dr. Alfred Cox, officers of the British Medical Association visited Winnipeg in September, 1924, at the time of the annual meeting of the M.M.A., and Sir Jenner addressed a public meeting in Central Church. From this time up to August, 1930, when Winnipeg played host to the British and Canadian Medical Associations, there are numerous references and articles regarding the meeting which will remain a shining mark in the history of the Manitoba Medical Association.

With issue No. 41, November, 1924, the Bulletin increased in size to 6" x 8¾". The editorial board then consisted of Dr. Ross Mitchell, Dr. J. D. Adamson and Mr. E. Court, Associate Secretary. Later Dr. Adamson and Mr. Court retired.

From time to time attention is drawn to the publication of books by Manitoba physicians: Dr. D. Nicholson, Wm. Boyd, Wm. Webster, James McGillivray, A. T. Cameron, C. R. Gilmour and A. J. Fraser.

In 1931 Dr. John M. McEachern became editor and acted for a year, being succeeded in 1933 by Dr. Clarence W. MacCharles.

In 1933 and 1934 the full effects of the depression which began towards the end of 1929 were being fully felt. Deputations from the Manitoba Medical Association conferred with the Federal Minister of the Interior, the Manitoba Government and the Winnipeg City Council. The responsibility of the municipality for the medical care of indigents was stressed. Finally the Winnipeg City Council admitted this point, and an arrangement for payment by the city for medical care furnished to Winnipeg citizens on unemployment relief was entered into. Later the arrangement was extended to the citizens of Greater Winnipeg and only within recent months has it been terminated.

Other topics which evoked much discussion were Workmen's Compensation, proposed amalgamation of the Manitoba Medical Association and the College of Physicians and Surgeons, Medical Social Welfare activities in Winnipeg, the cost of medical education and medical economics.

The provincial Department of Health and Public Welfare and the College of Physicians and Surgeons agreed to utilize the Bulletin as a means of informing the medical profession.

In 1934 the publication was faced with the necessity either of restricting its size and the number of copies printed or becoming self-supporting, or nearly so. The latter course was adopted and Mr. J. G. Whitley became Business Manager. On his advice the size was increased to 8″ x 11″, and it was styled the REVIEW instead of the Bulletin. Much more advertising was secured and clinical articles appeared regularly. This year was also marked by the celebration of the Golden Jubilee of the Manitoba Medical College.

The years brought their inevitable toll and the Bulletin or Review had to carry obituary notices of beloved and honored members of the profession.

Under the editorship of Dr. F. Gerard Allison and presently of Dr. J. C. Hossack, the Manitoba Medical Review has become to be even more important as a means of informing the physicians of the province of what is being done by organized medicine. The Review has come of age and the brown pocket leaflet of 1921 would hardly recognize his descendant of 1944, increased in size four times, with bright yellow cover and sporting the crest of the Manitoba Medical Association.

Yet 1944 derives logically from 1921 and the purpose of the Review remains the same as that mentioned in the Foreword of No. 1, July, 1921: "to secure the unification of the efforts of medical men to deal with matters of importance to the profession as well as to the public". The officers of the Manitoba Medical Association in 1921 builded even better than they knew. Ross Mitchell.

★ ★ ★

Obituary

Dr. David M. Genoff died at his home in Winnipeg on June 17. Born in Russia 57 years ago he came to Canada and graduated from Manitoba Medical College in 1916. For five years he practised in rural Saskatchewan and Manitoba, and then took a post-graduate course in Rush Medical College, Chicago.

Returning to Winnipeg in 1921 he specialized in ophthalmology and otolaryngology.

He is survived by his widow and two daughters, Mrs. (Dr.) M. S. Margolese, and Mrs. J. Margolis, wife of Capt. Jack Margolis, R.C.A.M.C., now overseas.

Association Page

Seventy-fifth Annual Meeting Canadian Medical Association

Many feared that "D" Day would come during the meeting. Those who were in Toronto at the 71st Annual Meeting of the C.M.A. during those disastrous June days of 1940 recall the pervading gloom as the Germans swept westward. This year we felt the "end of the beginning" had passed and we were going to win, though the casualty lists would be formidable.

The meeting was a most successful one, over 1,326 registrations. The commercial exhibits were well worth visiting. The three Services had informative and well displayed exhibits. There was considerable space devoted to penicillin, which is in keeping with the possibilities of penicillin in the fight against staphylococci. To mention in detail, a Petri dish 4" in diameter had a gelatine blood culture plate with a ½ inch strip across the plate innoculated with penicillium notatium. At right angles to this strip were ½ inch strips of cultures of streptococci, staphylococci, pneumococci and colon bacilli. The colon bacilli had grown onto the penicillin strip while the three other types of cocci had all receded from where their line crossed the penicillin ½ inch strip.

The Executive of the C.M.A. met May 18th, 19th and 20th, followed by the Council for two full days, Monday and Tuesday. The Report to Council consisted of some 46 pages. Many items in this report were of a routine nature. However, I am giving details of the report of the Chairman of General Council, Dr. Archer, and the Chairman of the Committee on Economics, Dr. Harris McPhedran, now President of the C.M.A.

Saskatoon was to be hostess to the C.M.A. if the war was over in 1945. Service units occupy dormitories in the University Building at present, which makes it impossible to successfully house the large number of medical men which attend a full dress meeting of the C.M.A. The 1943 meeting in Montreal was only a meeting of Council so it was decided if a full dress meeting was to be held in 1945 Montreal would be the City, making up for the lack of a scientific meeting in 1943. As mentioned previously, Dr. Harris McPhedran is president and Dr. Leon Gerin Lajoie of Montreal is president-elect.

Dr. F. G. McGuinness is Manitoba representative of the Executive Council of the C.M.A.

Dr. Veniot, M.P. for N.B. and ranking doctor on Social Security Committee, gave Council a resume of the proceedings of the Committee to date. He mentioned that the nine medical men on this Committee were alert to the interests of the profession and the relations with other members of the Committee were most amicable. Dr. Veniot thought the Committee on Social Security would recommend the present draft (7th) of the proposed Health Insurance Bill to Parliament without many changes. The real struggle for radical alteration of the proposed bill, if and when it is implemented, would be in the Provinces.

Manitoba representatives to Council were as follows: A. F. Menzies, S. Schultz, P. H. McNulty, A. Hollenberg, W. G. Beaton, D. L. Scott, D. C. Aikenhead and F. G. McGuinness.

At Jasper in 1942 some 18 Principles relating to Health Insurance were agreed to by the C.M.A. Council. It was deemed advisable to revise those principles in the light of 1944 (as revised they are in this issue of the Review under the heading "Principles, etc."). These 18 principles were taken up clause by clause in Council. Principle No. 6, in which Manitoba differs from the remaining provinces, in that patients may visit a specialist direct without contacting a general practitioner (other provinces wish patient to first consult a general practitioner). This point caused considerable discussion, in which all the delegates from Manitoba took part. A division occurred, in which the views held by Manitoba were in the minority. Here is where Dr. Archer showed himself No. 1 conciliator. He allowed an hour to lapse then asked for a committee with a member from each province to go into the point raised by Manitoba. This committee was appointed and Dr. Everett from N.B. moved that the division of one hour previously be expunged from the records of Council. Next morning Dr. Strong of B.C., chairman of this emergency committee, brought in a resolution upon No. 6 of Principles, which was acceptable to Manitoba and passed Council unanimously.

It was the considered opinion of Council that Health Insurance could not be adopted in one province without affecting the interests of the remaining provinces. A Health Insurance Act was passed by the Quebec Legislature in 1943. Ontario and Saskatchewan passed a Health Insurance Act at the recently prorogued sessions. The Act has not been implemented in any of the three mentioned provinces. No one had definite information as to the time these Acts would be enforced. Someone suggested that it depended upon what political party was in power. Many senior members of Council deprecated the possibility that Health Insurance should ever become a political football.

Dr. Strong of Vancouver expressed a hope that Health Insurance might be introduced in stages, suggesting hospitalization first. As to the successive order of medicine, surgery, obstetrics, it would be a matter of agreement between the public and the profession.

Specialists

A spirited discussion occurred upon this item. An Eastern member of Council generated considerable heat in outlining what he considered variation in the selection of specialists from his province. Dr. F. Patch, President of Royal College of Physicians and Surgeons of Canada, gave a factual and detailed statement of the policy and work of the college to date. Council received the report from the Executive upon Specialists but did not adopt it. Council felt that considerable discussion should take place between interested groups before it adopted a policy upon the Certification of Specialists.

Irregular Practitioners

An attempt has been made to form a committee to get factual material upon the various cults. This investigation would take considerable money. The use of public funds for such a purpose would probably not be popular from a political viewpoint.

Housing

It has been submitted that even were the Health Insurance Act in force that with the economic fear of loss of employment and bad housing of a certain percentage of our population, the health of the nation would still be far from satisfactory. With this in mind, a resolution was passed by Council that the C.M.A. take a more active interest in Housing.

Regional Dependents' Board

No C.M.A. meeting would be complete without R.D.B. coming up. A tariff of fees has been published by the Board, which is a composite of the nine fee schedules as submitted by the nine provincial divisions of the C.M.A. This R.D.B. schedule of fees is not acceptable to some of the provinces. Further study and discussion between members of the executive of the C.M.A. and the R.D.B. was recommended.

Narcotics

Canada has been using 9,000 oz. of codeine sulph. over and above replacement yearly for the past three years. Doctors should exercise strict economy in prescribing codeine sulph. Please prescribe half a dozen tablets in place of twelve.

General Session, Friday morning, May 26th, was devoted to a symposium on Health Insurance.

1. General Review of the Present Status of Health Insurance in Canada. By Dr. A. E. Archer, Chairman of Health Insurance Committee.
2. The Municipal Doctor System:
   (a) Its Strength. By Dr. C. M. Thomas, Rivers, Man.
   (b) Its Weaknesses. By Dr. C. S. MacLean, Regina, Sask.
3. Health Insurance from the viewpoint of the General Practitioner. By Dr. Victor Johnston, Lucknow, Ontario.
4. The Views of Recent Graduates. By Dr. Clare Robinson, Kingston, Ontario, representing the Canadian Association of Medical Students and Internes (C.A.M.S.I.).
5. Question Period.

I read the account of the General Session Friday morning in a large Eastern daily newspaper. The only member mentioned was Dr. Johnston of Lucknow, Ontario. The three western doctors' names and views were conspicuous by their absence. Geography and sectionalism play too large a part in Canada. Sudbury is the western part of Canada to a large section of Ontario.

This is a rather sour note to leave the record of convention. On the whole, the convention was a great success. One met a host of old friends and made contacts with many new and interesting people. If only the war were over and our colleagues overseas had the privilege of attending the 1945 convention!

Revision of Principles Relating to Health Insurance as Revised at the C.M.A. Council 75th Annual Meeting in Toronto, May, 1944

180. Subject to further revisions to be made immediately prior to this meeting by the Executive Committee, the Committee on Economics, after much study and in the light of various suggestions received, recommends that the "Principles Relating to Health Insurance", as of May 1944 read as follows:

1. The Canadian Medical Association approves the adoption of the principle of contributory Health Insurance, and favours a plan which will secure the development and provision of the highest standards of health services, preventive and curative, provided the plan be fair both to the insured and to all those rendering the services.

2. Inasmuch as the health of the people depends to a great extent upon environmental conditions under which they live and work, upon security against fear and want, upon adequate nutrition, upon educational facilities, and upon the opportunities for exercise and leisure, the improvement and extension of measures to satisfy these needs should precede or accompany any future organization of medical service. Failure to provide these measures will seriously jeopardize the success of any Health Insurance plan.

3. It is not in the national interest that the state convert the whole medical profession into a salaried service.

4. It is not in the patient's interest that the state invade the professional aspects of the patient-doctor relationship. Subject to geographical and ethical restrictions this relationship includes free choice of doctor by patient, and free choice of patient by doctor; it implies also maintenance of the confidential nature of medical practice.

5. The plan must be compulsory for persons having an annual income insufficient to meet the costs of adequate medical care.

6. Health benefits should be organized as follows:
   (a) Every regularly qualified, duly licensed medical practitioner, in good standing in the province, should be eligible to practise under the plan.
   (b) The benefits conferred should be such as to provide for the prevention of disease and for the application of all necessary and adequate diagnostic and curative procedures and treatment. Specialist and consultant medical services should be available.
   (c) The following additional services should be available through the medical practitioner:
      1—Nursing service
      2—Hospital care
      3—Auxiliary services usually in hospital
      4—Pharmaceutical service subject to regulation .
   (d) Dental service.

7. The dependents of insured persons should be included in the health benefits.

8. Medical care for resident and transient indigents should be provided under the plan, the Government to pay the premiums.

9. The principle of insured persons being required to contribute to the insurance fund is strongly endorsed.

10. Health Insurance should be administered by an independent non-political commission representative of those giving and those receiving the services. Matters of professional detail should be administered by committees representative of the professional groups concerned.

11. Under Health Insurance the Chief Executive Officer to the Commission and the Regional Executive Officer should be physicians appointed by the Commission from a list submitted by the organized profession of the province.

12. Each province should be served by an adequate Department of Public Health, organized on the basis of the practising physician taking an active part in the prevention of disease.

13. Licensure to practise the healing arts should be employed, in the future as in the past, primarily for the protection of the public. Therefore it is in the interests of the patient that all who desire licensure to practise a healing art should be required to conform to a uniform high standard of preliminary education and of training in the recognized basic sciences as well as to furnish proof of adequate preparation in the clinical and technical subjects.

14. The method, or methods, of remuneration of the medical practitioners, and the rate thereof, should be as agreed upon by the medical profession and the Commission of the province.

15. Any Health Insurance plan should be studied and approved actuarially before adoption and thereafter at periodic intervals.

16. Every effort should be made to maintain health services at the highest possible level.
   (a) Adequate facilities for clinical teaching in the medical colleges and hospitals;
   (b) Post-graduate training of all medical practitioners at frequent intervals;
   (c) Necessary facilities and support for research.

17. Cash benefits, if provided, should not be taken from the health insurance funds.

18. In the provision of health services, cognizance should be taken of the fact that well over a third of Canadian doctors are now in the Armed Forces. With their return to civil life the integration of these doctors into the plan will be essential and will add materially to the efficiency and extent of the health services.

Letters to the Editor from Overseas

15th Canadian General Hospital,
Dear Sirs: C.A.O., C.M.F., May 21, 1944.

Thank you for your letter and bulletin of February 15th. It is indeed interesting to learn of events at home.

At the time of your writing I was with the 5th Canadian Field Ambulance, together with three other Manitoba men—Major George Fairfield, Major Mike Carlton, Capt. Max Sector, so you can see the West was fairly well represented in an Eastern Ambulance.

I was with the 1st Can. Div. Engineers from Oct., 1943, to Nov., 1943, and had many happy experiences with him in Sicily and Italy. Many of them were from Manitoba too, and a grand bunch they were. Don Love, Neil Dickson, Jack Osborne. Left them to go to the 5th Field Ambulance and stayed with them until 1st May, 1944, when, on account of my foot being unfit for further field duty, I was transferred to the staff of the 15th Can. Gen. Hospital.

Please accept my heartfelt thanks for your many parcels and most especially for your interest in we who are overseas.

Regret to say that I am still a Capt. after three years and a half in the Army, three years of which has been overseas, but thank you for your kindly tact in addressing your letter to Major V.J. etc.

Best regards, Capt. V. J. McKenty, M.C.

★ ★ ★

H.Q. 1 Cdn. Div.,
Dear Editor: Cdn. Army, C.M.F.,

Many thanks for the copy of the Review for February and accompanying letter. I have read it with enthusiasm and will ensure its circulation amongst other M.O's. out here and though they don't all come from the West I'm sure will find a common interest in Medical literature of any kind. We have recently lost a stout member of our crowd in May in Major Mike Carleton who is now in charge of Medical Boards down the line. Also recently Major George Ferguson has joined the staff of 5 Cdn. Gen. Hospital in Italy. Other Winnipeggers still with us are Major P. K. Tisdale and Capt. J. C. Poole (now of Vancouver)—so there are a few of us left.

Thanking you and the Society again for remembering us., Ian S. Maclean.

★ ★ ★

Lt.-Col. C. W. Clark, O/IC Surgery,
Dear Dr. Hossack: No. 11, C.G.H., C.A.O.

Many thanks for your letter and the copies of the Medical Review which are now arriving regularly. I am now back in the U.K. with a new unit and we are now up to our necks in work. With No. 11 we have Eric Austin and Norm. Cook, who hail from British Columbia, but were both Winnipeg graduates about 1930. I left No. 5 in Sicily in January, where the Unit has done an excellent job of work. Many of the originals have been transferred to other units and, as you know, several have returned home. It's nice to be back in England working in excellent surroundings and away from the dirt, dust, bugs and perpetual flies. For the first few months in Sicily we ran through patients almost like an assembly line in Willow Run.

Since coming back to U.K. I have seen quite a few of the boys. At a recent clinical meeting I saw John Hillsman, who is much thinner and more tanned than I had ever seen him. Cherry Bleeks is at No. 13 C.G.H. Art Hay is looking fine and I saw him at a meeting at his hospital a few days ago. Col. Fahrni has been down to visit us for last week-end. We tried to play him out, showing him something like about 350 surgical cases and, in addition, put him to work in the operating room doing some cases. He seemed to enjoy getting back into an operating theatre again. I saw Sammy Boyd about two weeks ago and I imagine by now you may have seen him also. Col. Percy Bell was out to see us today and gave me some news of Winnipeg.

We are all beginning to get a bit tired of this war and would like to see it finished soon and are eagerly awaiting the so-called second front. It is now well into my fifth year overseas and Winnipeg seems a long way off. Your bulletin and parcels help to remind us that maybe a few people back home remember us after all these years. Keep up the good work in sending the bulletin. We look forward to it.

Best regards to yourself and the Winnipeg and Manitoba Medical Societies and before very long I hope to see you all again.

Sincerely,
Cecil W. Clark.

★ ★ ★

No. 2 Canadian General Hospital, C.A.O.,
Dear Doctor Hossack:

The March issue of the Manitoba Medical Review reached me here a few days ago and I certainly was pleased to receive it. It is very pleasant to feel that one is still regarded as a member of the Society after such a long absence and especially so now that I have severed my connection with No. 5. The majority of my associates here are from the East but Clint. Crawford, who practised in The Pas, is on the Surgical side and, no doubt, a copy of the Review mailed to Major C. S. Crawford would give him much pleasure.

You have already noted that Cec. Clark has his promotion and pleasantly enough is located in the former residence of No. 5. Cherry Bleeks is with No. 13. We all had a very pleasant time in Sicily and regretted leaving our old Unit. I can now say, without bias, that the Winnipeg medical profession can be well proud of it. Roy Richardson will make a very able C.O. When I left in December Chuck Walton, Ben Schoemperlen, Clare Rumball, Carl Henneberg, Norm. Elvin and Roy were fine.

Col. Fahrni looks well and has been around on several occasions. He has been most helpful at some of the meetings regarding the future status of Medical Practice in Canada and, no doubt, you already know that the medical men overseas are keenly interested.

This is a busy hospital and one comes in contact with a good deal of both organic and psychological medicine. I think the experience we have gained has broadened our outlook and has certainly made us more appreciative of the "little things."

Would you be good enough to pass along my best thanks and kindest regards to all the members of the Society and I know I voice the sentiments of all our members on this side when I say "we hope to be with you soon again."

Yours most sincerely, Sam Boyd.

★ ★ ★

Dr. W. E. Campbell, 23 May, 1944.
Dear Billy:

The last I heard you were the President of the Winnipeg Medical Society so I'm addressing this to you. If you have been retired, forcibly or otherwise, please pass this on to the proper person. I received a parcel of food from the Society today and wish to express my appreciation. The food here is plentiful but the little extras help a lot. I am quite well but, unfortunately, cannot write a lot about what we are doing or who I have been seeing. I have seen, however, quite a few of the Manitoba doctors here and all are, without exception, doing excellent work. My own Unit is very interesting—Surgery on Wheels—wonderful equipment, and we can do any type of work right up to the forward area.

Give my regards to Baldy. Thanks again,

John Hillsman.

Personal Notes and Social News

Dr. Wood Bryant, of Victoria, B.C., recently visited Winnipeg, where he spent an enjoyable holiday renewing old acquaintances.

♦

Dr. Emma Adamson and family have left Winnipeg for Ottawa, Ont., where they will reside for an indefinite period with Wing Commander G. L. Adamson.

♦

The Executive and Members of this Association wish to express their deepest sympathy to Dr. Cameron Corbett, of Norway House, on the loss of his father, who died at Strathroy, Ont., on June 22nd, 1944.

♦

Captain Peter O. Lehmann, R.C.A.M.C., son of the late Dr. J. E. Lehmann, of Winnipeg, and Mrs. E. Lehmann, of Toronto, was married on May 27th, 1944, to Rita Arlene, daughter of Mr. and Mrs. Arthur M. Edwards, of Bridgehampton, Long Island, N.Y., at Erskine and American church, Montreal.

♦

Dr. and Mrs. A. T. Gowron are happy to announce the birth of a daughter (Tiana Lee) on June 13th, 1944, at St. Boniface Hospital.

♦

Dr. and Mrs. George W. Fletcher formerly of Winnipeg, now of Victoria, B.C., were recent visitors to Winnipeg where they enjoyed renewing acquaintances with their many friends.

♦

Dr. and Mrs. S. Kobrinsky and daughter have returned to Winnipeg after spending a holiday at Chicago, Ill.

♦

Surg.-Lieut. Ken G. S. Davidson, R.C.N.V.R., recently returned from England. After spending a short leave with his parents, Lieut.-Col. and Mrs. A. M. Davidson, he left for the East Coast where he has been posted.

♦

Dr. T. H. Cuddy has returned to Winnipeg after attending the American Medical Association meeting at Chicago, Ill.

♦

The following Manitoba doctors were successful in passing the recent examinations of the Medical Council of Canada: Drs. L. T. Maxwell, Portage la Prairie; J. B. R. Cosgrove, Tilson; R. F. Friesen, Gretna; W. B. Leach, Fort Garry; H. H. Lipman, Beausejour; J. A. McNeill, Brandon; F. J. E. Purdy, Griswold; V. J. H. Sharpe, Brandon; J. W. Whiteford, Harmsworth; J. A. Hay, Foxwarren; B. A. Cates, Reston; E. V. Helem, Medora.

Capt. G. S. Baldry, R.C.A.M.C., now stationed at Halifax, has been appointed district medical officer for M.D. 6.

♦

Dr. Bruce Chown has been named chairman of the newly created tuberculosis control commission.

♦

Lt.-Col. A. M. Davidson has been appointed Pensions Medical Examiner at the Deer Lodge Military Hospital. Previous to this appointment, he served four years with the R.C.A.M.C.

♦

Dr. Max Benjamin Walters (U. of Man. 44), is now an associate at the Winnipeg Clinic.

♦

Dr. H. M. Creighton, formerly of Oak River, Man., is now located at Dauphin, Man.

♦

Dr. N. J. Hjalmerson, recently of Pilot Mound, Man., is now located at Woodlands, Man.

♦

Dr. S. R. Harrison has re-entered civilian practice from Military service, and is now located at Edmonton, Alta.

♦

Dr. and Mrs. D. A. Aikenhead received the congratulations of their many friends when they celebrated their twenty-fifth Wedding Anniversary on Sunday, June 18th, 1944.

♦

Dr. F. E. McKim has left Winnipeg to take up practice at Vita, Man.

♦

Young Teenie,
Just home from
prep. school.
"Oh Mother:
would you care
to see me light
a cigarette and
blow smoke rings?"
Mother: No, my darling!
I would rather see you
Inhale first."

Department of Health and Public Welfare

Comparisons Communicable Diseases—Manitoba

(Whites Only)

DISEASES	1944 Apr. 23 to May 20	1944 Mar. 26 to Apr. 22	1943 Apr. 25 to May 22	1943 Mar. 28 to Apr. 24	TOTALS Jan. 1 to May 20, '44	TOTALS Jan. 1 to May 22, '43
Anterior Poliomyelitis	----	----	1	----	1	8
Chickenpox	129	183	143	132	1198	823
Diphtheria	7	11	31	25	52	139
Diphtheria Carriers	1	1	2	3	13	13
Dysentery—Amoebic	----	----	----	1	----	2
Dysentery—Bacillary	----	----	3	----	----	6
Erysipelas	11	8	7	3	41	29
Encephalitis	----	----	2	----	2	4
Influenza	1	15	37	40	117	331
Measles	1383	1250	494	448	3814	1484
Measles—German	32	41	54	15	198	82
Meningococcal Meningitis	1	4	1	8	11	19
Mumps	151	240	414	508	1337	2510
Ophthalmia Neonatorum	----	----	----	----	----	----
Pneumonia—Lobar	11	14	12	20	35	99
Puerperal Fever	1	1	----	----	4	1
Scarlet Fever	244	312	180	148	1450	621
Septic Sore Throat	2	2	1	5	14	20
Smallpox	----	----	----	----	----	----
Tetanus	1	----	----	----	1	----
Trachoma	----	----	----	----	----	2
Tuberculosis	57	34	62	41	212	245
Typhoid Fever	2	4	4	3	9	13
Typhoid Paratyphoid	----	----	----	----	----	----
Typhoid Carriers	----	----	----	1	----	1
Undulant Fever	----	----	1	----	1	3
Whooping Cough	17	18	294	309	123	1131
Gonorrhoea	144	144	156	141	679	747
Syphilis	44	55	46	37	244	210
Octinomycosis	----	1	1	----	2	1
Meningococcal Meningitis Carriers	----	----	----	----	----	6

DISEASE	*738,000 Manitoba	*3,825,000 Ontario	*906,000 Saskatchewan	*2,972,300 Minnesota	*641,935 North Dakota
*Approximate Populations.					
Actinomycosis	----	----	----	----	1
Anterior Poliomyelitis	----	1	----	1	----
Chickenpox	129	1444	159	----	----
Diphtheria	7	1	7	12	3
Diphtheria Carriers	1	----	1	----	----
Dysentery—Amoebic	----	----	----	9	----
Bacillary	----	----	----	1	----
Erysipelas	11	9	1	----	2
Influenza	1	79	203	----	56
Encephalitis Epidemica	----	----	1	----	----
Malaria	----	----	----	6	----
Measles	1383	2720	377	2258	231
German Measles	32	610	149	----	----
Meningococcal Meningitis	1	15	1	19	12
Mumps	151	921	44	----	3
Ophthalmia Neonatorum	----	----	----	----	----
Puerperal Fever	1	----	----	----	----
Scarlet Fever	244	953	83	600	151
Septic Sore Throat	2	1	7	----	2
Smallpox	----	----	----	----	----
Tetanus	1	----	----	----	----
Trachoma	----	----	3	----	1
Tuberculosis	58	283	42	1	21
Tularemia	----	1	----	1	----
Typhoid Fever	2	4	2	----	----
Typhoid Para-Typhoid	----	1	----	----	----
Undulant Fever	----	5	----	19	1
Whooping Cough	17	149	80	56	4
Gonorrhoea	144	445	----	----	19
Syphilis	44	312	----	----	30

DEATHS FROM COMMUNICABLE DISEASES

April, 1944

URBAN — Cancer 46, Pneumonia (other forms) 6, Tuberculosis 4, Syphilis 3, Lethargic encephalitis 2, Diphtheria 1, Influenza 1, Measles 1, Pneumonia Lobar 1, Chicken Pox 1, Hodgkin's Disease 1. Other deaths under 1 year 19. Other deaths over 1 year 178. Stillbirths 11. Total 275.

RURAL — Cancer 20, Tuberculosis 16, Pneumonia (other forms) 7, Influenza 4, Pneumonia Lobar 3, Septic Sore Throat 2, Lethargic encephalitis 1, Scarlet fever 1, Whooping Cough 1. Other deaths under 1 year 24. Other deaths over 1 year 161. Stillbirths 9. Total 249.

INDIANS—Influenza 3, Pneumonia (other forms) 2, Pneumonia Lobar 1, Tuberculosis 1. Other deaths under 1 year 1. Other deaths over 1 year 3*. Stillbirths 0. Total 11*.

*One white on Indian Reserve included.

Measles are still epidemic in the Province.

Diphtheria of a virulent type has appeared north and east of St. Rose du Lac in the Municipality of Lawrence and also in the Rural Municipalities of Dauphin and Gilbert Plains.

Dysentery cannot be properly diagnosed unless stools are submitted for laboratory examination.

Typhoid Fever — The epidemic in the vicinity of Anama Bay mentioned in the Review a month ago affected 25 Treaty Indians and 11 white persons. Lack of proper sanitation in these remote areas encourages the spread of this infection when introduced. Lack of medical services prevents early recognition and control of all communicable diseases.